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REMARKS

Claims 1-53 remain before the Examiner for reconsideration. Claims 1, 2, 12, 22, 33 have been amended.

In the Office Action dated February 17, 2006, the Examiner rejected Claims 1-4, 12, 20, 22-25 and 33 under 35 U.S.C. 103(a) "as being unpatentable over Foresman in view of Day." Specifically, the Examiner asserted that:

Foresman discloses in Figure 1 and in the specification a device and method for teaching mathematics comprising a work surface 151 and a plurality of movable elements 101 and 102, where each element comprises a visible mathematical symbol and can be selectively placed on the work surface. Foresman fails to disclose that the pieces are slideable upon the work surface. However, this feature is well known in the form of magnetic display boards. Day discloses one example of magnetic pieces which may be placed on a board. It would have been obvious to one of ordinary skill in the relevant art to modify the device of Foresman by providing a magnetic board and pieces for the purpose of providing a display which is more easily manipulated. With respect to claims 2 and 23, Foresman discloses a frame which defines the boundaries of the work surface. With respect to claims 4 and 25, it is not clear how the boundaries of the claim are defined. Foresman does disclose in Figure 2A that certain of the symbols are enlarged. With respect to claims 12 and 33, the elements are shaped such that the symbol can be identified by touch. With respect to claim 20, each of the recited symbols is disclosed in Figure 1 of Foresman.

Applicants respectfully traverse the Examiner's rejection.

Foresman discloses an education system kit for teaching students mathematics via a work surface (151). A plurality of visible movable elements (101, 102) are selectively placed on the work surface (151) allowing teachers and/or students to symbolically visualize mathematical principles. The movable elements are secured on the work surface using touch fasteners (210). However, contrary to the present invention, the touch fasteners of Foresman cannot be moved or slid across the work surface. It is significantly easier for a student, and particularly a blind student, to control and understand the location of a moveable element when the element is able to be slid or dragged across the work surface.

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The disclosure of Day does not overcome the deficiencies of Foresman. While Day uses magnets to attach elements or enhancements (14, 18, 22) onto a figurine (10), there is no teaching that such enhancements are slidably or otherwise moveably positionable on the figurine of Day. To the contrary, Day uses the magnets to hold or keep the enhancements in place on the figurine. In that regard, at column 1, lines 59-60, Day discloses, *inter alia* that the "enhancements are not easily dislodgeable from the figure." Clearly, the enhancements of Day are held in place on the figurine with very little or no potential for movement once they are attached. The visually impaired user of the device of the present invention must be able to slide the elements from a perimeter storage area to a central work area.

In any event, the Examiner's combination of Foresman and Day is improper because there is no basis in either Foresman or Day from which it can reasonably be inferred that one skilled in the art would have been led or motivated to modify Foresman in the manner proposed by the Examiner. See, for example, Ex parte Chicago Rawhide Mfg. Co., 223 USPQ 351, 353 (P.O. Bd. Appl. 1984) ("The prior art must provide a motivation or reason for a worker in the art without the benefit of appellant's specification to make the necessary changes in the reference device."); Schenk v. Norton, 218 USPQ 698, 702 (Fed. Cir. 1983) ("Modification unwarranted by the disclosure of a reference is improper."); Ex Parte Acosta, 211 USPQ 636, 637 (P.O. Bd. Appls. 1980) (Examiner's combination of two references is improper where there is no basis in the record from which it can reasonably be inferred that one skilled in the art would have been led or motivated to modify the primary reference in the manner proposed by the Examiner.). Further, applicants respectfully assert that Day is not analogous art to the present invention or to that of Foresman.

Additionally, the present invention provides for the use of Braille indicia (for example, Nemeth Braille indicia) on each movable elements slidably movable on the work surface of the present invention. Applicants have amended independent claims 1 and 22 to indicate:

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each of the movable elements further comprising Braille indicia on the front surface thereof corresponding to the at least a portion of the visible mathematical symbol,

There is no disclosure or suggestion in either Foresman or Day to provide Braille indicia on any elements thereof.

Further, with respect to claims 2 and 23, the Examiner is incorrect that Foresman "discloses a frame which defines the boundaries of the work surface." Collapsible frame (152) of Foresman is internal to the work surface (153) thereof and does not define a boundary or border suitable for use by a visually impaired person to define the bounds of a work surface for positioning elements thereon. Applicants have amended claims 2 and 23 to further clarify that the boundary of the present invention is an abutment boundary.

The Examiner also rejected Claims 5-11, 13-19 and 26-41 under 35 U.S.C. 103(a) "as being unpatentable over Foresman in view of Day, and further in view of Olivera." Specifically, the Examiner asserted that:

Foresman as viewed with Day discloses all of the limitations of the claims with the exception of the features pertaining to the placement and storage of the elements. Olivera discloses in Figure 1 and in the specification a display device and method comprising elements each having a symbol, where the elements are stored in stacked fashion in compartments around the perimeter of the device when not in use, each compartment containing a plurality of elements each having a specific symbol. It would have been obvious to one of ordinary skill in the relevant art to modify the device and method of Foresman as viewed with Day by storing like elements in stacks in compartments around the perimeter of the display area for the purpose of making it easier for a user to selectively obtain and use a desired symbol in the display.

Applicants respectfully traverse the Examiner's rejection for the reasons set forth above. Without specifically addressing the deficiencies of Olivera, Olivera does not overcome the deficiencies of Foresman and Day as set forth above.

Claim 21 is also rejected by the Examiner under 35 U.S.C. 103(a) "as being unpatentable over Foresman in view of Day, and further in view of Jackson." Specifically, the Examiner asserted that:

Foresman as viewed with Day discloses all of the limitations of the claim with the exception of the question mark and remainder symbol (Foresman discloses a

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decimal point 203C in Figures 2A and 2B). Jackson discloses in Figure 1 and in the specification a display device and method for teaching math comprising elements each having a symbol, including a question mark 11 and a remainder symbol 4. It would have been obvious to one of ordinary skill in the relevant art to modify the device and method of Foresman as viewed with Day by providing a question mark and a remainder symbol for the purpose of expanding the types of mathematical expressions that may be displayed.

Applicants respectfully traverse the Examiner's rejection for the reasons set forth above. Without specifically addressing the deficiencies of Jackson, Jackson does not overcome the deficiencies of Foresman and Day as set forth above.

The Examiner rejected Claim 42 under 35 U.S.C. 103(a) "as being unpatentable over Foresman in view of Day and Olivera, and further in view of Jackson." Specifically, the Examiner asserted that:

Foresman as viewed with Day and Olivera discloses all of the limitations of the claim with the exception of the question mark and remainder symbol (Foresman discloses a decimal point 203C in Figures 2A and 2B). Jackson discloses in Figure 1 and in the specification a display device and method for teaching math comprising elements each having a symbol, including a question mark 11 and a remainder symbol 4. It would have been obvious to one of ordinary skill in the relevant art to modify the device and method of Foresman as viewed with Day and Olivera by providing a question mark and a remainder symbol for the purpose of expanding the types of mathematical expressions that may be displayed.

Applicants respectfully traverse the Examiner's rejection for the reasons set forth above. Without specifically addressing the deficiencies of Jackson, Jackson does not overcome the deficiencies of Foresman, Day, and Olivera as set forth above.

The Examiner also rejected Claims 43-47 under 35 U.S.C. 103(a) "as being unpatentable over Foresman in view of Day, and further in view of Foster." Specifically, the Examiner asserted that:

Foresman as viewed with Day discloses all of the limitations of the claims with the exception of the method of having a visually impaired student use the display. While the symbols of Foresman are usable by a visually impaired student, this method is not disclosed or suggested. However, Foster discloses in column 8, lines 39-50 a display board with pieces which have Braille markings on them. This feature is clearly intended for use by visually impaired students, thus suggesting the claimed method. It would have been obvious to one of

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ordinary skill in the relevant art to modify the device and method of Foresman as viewed with Day by providing markings for visually impaired users for the purpose of allowing such users to learn using the device.

Applicants respectfully traverse the Examiner's rejection.

Initially, Foster does not overcome the deficiencies of Foresman and Day as set forth above. Foster discloses a framed multi-educational device having work pieces imprinted in numerals and a Braille equivalent. The work pieces are affixed to the frame and are moveably only in defined slots or rows. Like the elements of Foresman and Day, the work pieces of Foster are not slidably positionable to any position on a work surface as are the elements of the present invention. Simply modifying the elements of Foresman (whether or not modified by the disclosure of Day) by adding Braille indicia or other indicia adapted to be understood by visually impaired individuals thereto, does not result in the present invention. Moreover, there is no motivation in those reference for such modifications. Given the lack of disclosure within the references to lead one of ordinary skill in the art to combine such reference and then to modify the combined disclosure thereof to arrive at the present invention, Applicants respectfully assert that the Examiner is impermissibly using the disclosure of the present invention as a guide in modifying the teachings of Foresman, Day and/or Foster. As the Federal Circuit stated in Orthopedic Equipment Co., Inc. v. United States, 702 F. 2d 1005, 1012, 217 USPQ 193, 199 (Fed. Cir. 1983):

It is wrong to use the patent in suit as a guide through the maze of prior art references, combining the right references in the right way so as to achieve the result of the claims in suit. Monday morning quarterbacking is quite improper when resolving the question of nonobviousness in a court of law.

Further, providing for the movable elements of the present invention to be slidably positionable to any position on the work surface of the present invention is very important in enabling a visually impaired student to relatively quickly construct mathematical equations on the work surface of the present invention as such mathematical equations are displayed upon a display (for example, a blackboard) used for teaching students that

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are not visually impaired. The present invention provides a substantial improvement in the art by, for example, enabling a visually impaired student to participate in a classroom setting with students that are not visually impaired and to construct mathematical equations that are of substantially the same form as the mathematical equations created upon the display used for instructing students that are not visually impaired.

The Examiner further rejected Claims 48-53 under 35 U.S.C. 103(a) "as being unpatentable over Foresman in view of Day and Foster, and further in view of Olivera." Specifically, the Examiner asserted that:

Foresman as viewed with Day and Foster discloses all of the limitations of the claims with the exception of the features pertaining to the placement and storage of the elements. Olivera discloses in Figure 1 and in the specification a display device and method comprising elements each having a symbol, where the elements are stored in stacked fashion in compartments around the perimeter of the device when not in use, each compartment containing a plurality of elements each having a specific symbol. It would have been obvious to one of ordinary skill in the relevant art to modify the device and method of Foresman as viewed with Day and Foster by storing like elements in stacks in compartments around the perimeter of the display area for the purpose of making it easier for a user to selectively obtain and use a desired symbol in the display.

Applicants respectfully traverse the Examiner's rejection for the reasons set forth above. Without specifically addressing the deficiencies of Olivera, Olivera does not overcome the deficiencies of Foresman, Day, and Foster as set forth above.

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In view of the above amendments and remarks, the Applicants respectfully requests that the Examiner, indicate the allowability of the Claims, and arrange for an official Notice of Allowance to be issued in due course.

Respectfully submitted,
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By /Henry E. Bartony, Jr., Reg. No. 34, 772/
Henry E. Bartony, Jr., Esq.
Reg. No. 34,772

Bartony & Hare, LLP
Law & Finance Building
Suite 1801
429 Fourth Avenue
Pittsburgh, Pennsylvania 15219
412-338-8632 (telephone)
412-338-6611 (fax)

Attorney for Applicant